## ABSTRACT OF THE DISCLOSURE

A method and apparatus for associating metric information with an abstracted link of an abstracted network map that includes certain network elements (NEs) of a data transport network involves computing routes through the data transport network between the NEs of the abstracted network map. The routes may be computed using the shortest widest path algorithm. The routes from an NE are exchanged with the other NEs of the abstracted network map, so that an edge NE receives the resource availability information of all optimal routes between pairs of NEs in the abstracted network map. The edge NE then transforms the resource availability of a corresponding optimal route into metric information of an abstracted link. The metric information is sent to a client associated with the abstracted network map to permit the client to make routing decisions.